

IN THE SPECIFICATION:

Please amend the Specification as follows:

At page 3, line 13, correct "23oC" to read ---23^oC---.

At page 3, line 20, correct "40oC" to read ---40^oC---.

At page 3, lines 26-30, delete "in forming the crystal gels of the invention are of the general configurations (Y-AY)_n copolymers, A-Z-A, and (A-Z)_n block copolymers, wherein the subscript n is two, three, four, five or more. In the case of multiarm block copolymers where n is 2, the block copolymer denoted by (A-Z)_n is A-Z-A. It is understood that the coupling agent is ignored for sake of simplicity in the description of the (A-Z)_n block" and insert

---in forming the crystal gels of the invention are of the general configurations (Y-AY)_n copolymers, A-Z-A, and (A-Z)_n block copolymers, wherein the subscript n is two, three, four, five or more. In the case of multiarm block copolymers where n is 2, the block copolymer denoted by (A-Z)_n is A-Z-A. It is understood that the coupling agent is ignored for sake of simplicity in the description of the (A-Z)_n block---

At page 3, line 31, P3, delete "(Y-AY)_n" and insert --- (Y-AY)_n ---.

At page 3, lines 34-35, delete "Y)_n, (Y) when next to (A) may be substantially non-crystalline or amorphous ethylene segments. For example a crystalline copolymer (Y-AY)_n" and insert

--- Y)_n, (Y) when next to (A) may be substantially non-crystalline or amorphous ethylene segments. For example a crystalline copolymer (Y-AY)_n ---.

At page 3, line 36, delete "(AY-AY)_n" and insert --- (AY-AY)_n ---.

At page 5, lines 29-38 and page 6, lines 1-4, delete

"The crystal gels of the invention can be formed into gel strands, gel tapes, gel sheets, and other articles of manufacture. Moreover, because of their improved tear resistance and resistance to fatigue, the crystal gels exhibit versatility as balloons for medical uses, such as balloon for valvuloplasty of the mitral valve, gastrointestinal balloon dilator, esophageal balloon dilator, dilating balloon catheter use in coronary angiogram and the like. Since the crystal gels are more tear resistant, they are especially useful for making condoms, toy balloons, and surgical and examination gloves. As toy balloons, the crystal gels are safer because it will not rupture or explode when punctured as would latex balloons which often times cause injuries or death to children by choking from pieces of latex rubber. The crystal gels are advantageously useful for making gloves, thin gloves for surgery and examination and thicker gloves for vibration damping which prevents damage to blood capillaries in the fingers and hand caused by handling strong shock and vibrating equipment."

At page 10, line 16, delete "(DCS)" and insert --- (DSC) ---.

At page 11, after line 12, insert the following paragraphs:

--- The crystal gels of the invention find use as airbags designed for rapid deployment by expanding pressurized or ignitable gas as shown in Figs 1a-9i, 10d, 10e, 12, and 15.

The various components are denoted by:

1 Shape of gel expansion envelop. 2 Gel, 3 External retainer, 5 internal retainer, 6 reinforcing retainer, 7 mechanical retainer, 8 semi integral retainer, 9 integral pin retainer, 10 partial external integral retainer, 12 body, 13 gas inlet from filter, 14 outer sheet, 15 inner sheet, 16 eye retainer ring cavity, 18, back partial integral retainer, 19 T retainer (integral reinforcing), 20 thin gel

diagraphm, 21 thick gel diagraphm, 22 multiple prograssive thinner gel diagraphm, 23 multiple prograssive thicker gel diagraphm, 24 multiple single layer expansion control elements, 25 single single layer expansion control elements, 26 dual single layer expansion control elements, 27 multiple multiple layer expansion control elements, 28 multiple layer diverted elements, 29 patterned MDE, 31 full retained gel cup, 32 partial retained gel cup, 33 gel cavity, 34 S gel shaped, 35 bulged gel, 36 compact assembly, 37 double layered, 38 multiple window, 39 doulbe gel, 40 baffle, 41 gel dia., 42 expanded 7a-7d, 43 non-uniform gel dia., 44 gel restrainer, 45 restrained envelope, 46 non-uniform gel expanded mass, 47 expansion retainer assembly, 48 expansion control elements, 50 dual expansion dia., 52 singel , 54 internal and external, 56 triple, 57 multiple layered, 58 triple internal, 59 triple small and dural large, 60 equal triple, 61 dural internal with single external surround dia., 10c driver gel dia., 10d enveloping driver dummy, 10e eveloping passanger dummy, 11 convential air bag deployment, 12 gel and break-out pressures, 13 gel diameter expansion final pressures.

The expansion of the gel air bag is substantially pure volume expansion or dilation as related to K, bulk modulus, y , young's modulus: $K=y/3(1-2t)$, $t=3k-2n/6k-2n$, where t =poisson's ratio, $b=1/k$ compressibility = -change in $V/(V \cdot \text{change in pressure } P)$.

Surface expansion measure of air bag from initial to expanded state is from 630 to 833% depending on thickness of original air bag. The initail air bag thickness can vary from .5 cm to 10 cms. (.5, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 cm and higher).---

At page 11, line 17-21, delete "The various representative crystalline/glassy domain/amorphous structures of S-E-EB-S, S-EB45-EP-S, S-E-EB25-S, S-E-EP-E-S, S-EP-E-S and S-EP-E-EP-S are illustrate in Figures 5-10 above. Although the structure are spheroid representation, cylinders and plates are also within the scope of the present invention." and insert

--- The various crystalline/glassy domain/amorphous structures of S-

E-EB-S, S-EB45-EP-S, S-E-EB25-S, S-E-EP-E-S, S-EP-E-S and S-EP-E-EP-S are spheroids, cylinders and plates are also within the scope of the present invention. ---

At page 11, lines 31-37 delete "CH₂- groups. There should be approximately at least 16 units of -(CH₂)- in sequence for crystallinity. Only the (-CH₂-)₄ units can crystallize, and then only if there are at least 4 units of (-CH₂-)₄ in sequence; alternatively, the polyethylene units are denoted by [-(CH₂-CH₂-CH₂-CH₂)-]₄, [(-CH₂-)₄]₄ or (-CH₂-)₁₆. The amount of (-CH₂-)₁₆ units forming the (E) midblocks of the block copolymers comprising the crystal gels of the invention should be at least about 20% which amount is capable of exhibiting a melting endotherm in differential scanning calorimeter (DSC) curves." and insert

--- CH₂- groups. There should be approximately at least 16 units of -(CH₂)- in sequence for crystallinity. Only the (-CH₂-)₄ units can crystallize, and then only if there are at least 4 units of (-CH₂-)₄ in sequence; alternatively, the polyethylene units are denoted by [-(CH₂-CH₂-CH₂-CH₂)-]₄, [(-CH₂-)₄]₄ or (-CH₂-)₁₆. The amount of (-CH₂-)₁₆ units forming the (E) midblocks of the block copolymers comprising the crystal gels of the invention should be at least about 20% which amount is capable of exhibiting a melting endotherm in differential scanning calorimeter (DSC) curves. ---

At page 12, line 1, delete "(-CH₂-)₁₆" and insert --- (-CH₂-)₁₆ ---.

At page 12, lines 11-21 delete "copolymers occurs at about 40oC, but can range from greater than about 25oC to about 60oC and higher. The crystalline block copolymers forming the crystal gels of the invention can exhibit melting endotherms (as shown by DSC) of about 25oC to about 75oC and higher. More specific melting endotherm values of the crystalline midblock block copolymers include: about 28oC, 29oC, 30oC, 31oC, 32oC, 33oC, 34oC, 35oC, 36oC, 37oC, 38oC, 39oC,

40oC, 41oC, 42oC, 43oC, 44oC, 45oC, 46oC, 47oC, 48oC, 49oC, 50oC, 51oC, 52oC, 53oC, 54oC, 55oC, 56oC, 57oC, 58oC, 59oC, 60oC, 61oC, 62oC, 63oC, 64oC, 65oC, 66oC, 67oC, 68oC, 69oC, 70oC, 71oC, 72oC, 73oC, 74oC, 75oC, 76oC, 77oC, 78oC, 79oC, 80oC, 90oC, 100oC, 110oC, 120oC, and higher, whereas, the melting endotherm (DSC) for conventional amorphous midblock segment block copolymers are about 10oC and lower." and insert

--- copolymers occurs at about 40oC, but can range from greater than about 25oC to about 60oC and higher. The crystalline block copolymers forming the crystal gels of the invention can exhibit melting endotherms (as shown by DSC) of about 25oC to about 75oC and higher. More specific melting endotherm values of the crystalline midblock block copolymers include: about 28oC, 29oC, 30oC, 31oC, 32oC, 33oC, 34oC, 35oC, 36oC, 37oC, 38oC, 39oC, 40oC, 41oC, 42oC, 43oC, 44oC, 45oC, 46oC, 47oC, 48oC, 49oC, 50oC, 51oC, 52oC, 53oC, 54oC, 55oC, 56oC, 57oC, 58oC, 59oC, 60oC, 61oC, 62oC, 63oC, 64oC, 65oC, 66oC, 67oC, 68oC, 69oC, 70oC, 71oC, 72oC, 73oC, 74oC, 75oC, 76oC, 77oC, 78oC, 79oC, 80oC, 90oC, 100oC, 110oC, 120oC, and higher, whereas, the melting endotherm (DSC) for conventional amorphous midblock segment block copolymers are about 10oC and lower.---

At page 12, line 24, delete "DCS" and insert -- -DSC ---.

At page 12, line 27, correct "(CH2) to read --- (CH₂) ---.

At page 12, lines 35-36, delete "(-CH₂-)₁₆ units should be at least about (0.67)₄" and insert --- (-CH₂-)₁₆ units should be at least about (0.67)₄ ---.

At page 13, lines 1-11 delete "(0.67)₄ or 20%. For sake of simplicity, when n is a subscript of -EB-, n denotes the percentage of (-CH₂-)₄ units, eg, n = 33 or 20% crystallinity which is the percentage of (0.67)₄ or "(-CH₂-)₁₆" units. Thus, when n = 28 or 72%

of $(-\text{CH}_2-)_4$ units, the % crystallinity is $(0.72)_4$ or 26.87% crystallinity attributed to $(-\text{CH}_2-)_4$ units, denoted by -EB28-. As a matter of convention, and for purposes of this specification involving hydrogenated polybutadiene: the notation -E- denotes at least about 85% of $(-\text{CH}_2-)_4$ units. The notation -B- denotes at least about 70% of $[-\text{CH}_2-\text{CH}(\text{C}_2\text{H}_5)-]$ units. The notation -EB- denotes between about 15 and 70% $[-\text{CH}_2-\text{CH}(\text{C}_2\text{H}_5)-]$ units. The notation -EB_n- denotes n% $[-\text{CH}_2-\text{CH}(\text{C}_2\text{H}_5)-]$ units. For hydrogenated polyisoprene: The notation -EP- denotes about at least 90% $[-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-]$ units" and insert

--- $(0.67)_4$ or 20%. For sake of simplicity, when n is a subscript of -EB-, n denotes the percentage of $(-\text{CH}_2-)_4$ units, eg, n = 33 or 20% crystallinity which is the percentage of $(0.67)_4$ or $(-\text{CH}_2-)_4$ units. Thus, when n = 28 or 72% of $(-\text{CH}_2-)_4$ units, the % crystallinity is $(0.72)_4$ or 26.87% crystallinity attributed to $(-\text{CH}_2-)_4$ units, denoted by -EB₂₈-. As a matter of convention, and for purposes of this specification involving hydrogenated polybutadiene: the notation -E- denotes at least about 85% of $(-\text{CH}_2-)_4$ units. The notation -B- denotes at least about 70% of $[-\text{CH}_2-\text{CH}(\text{C}_2\text{H}_5)-]$ units. The notation -EB- denotes between about 15 and 70% $[-\text{CH}_2-\text{CH}(\text{C}_2\text{H}_5)-]$ units. The notation -EB_n- denotes n% $[-\text{CH}_2-\text{CH}(\text{C}_2\text{H}_5)-]$ units. For hydrogenated polyisoprene: The notation -EP- denotes about at least 90% $[-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-]$ units ---.

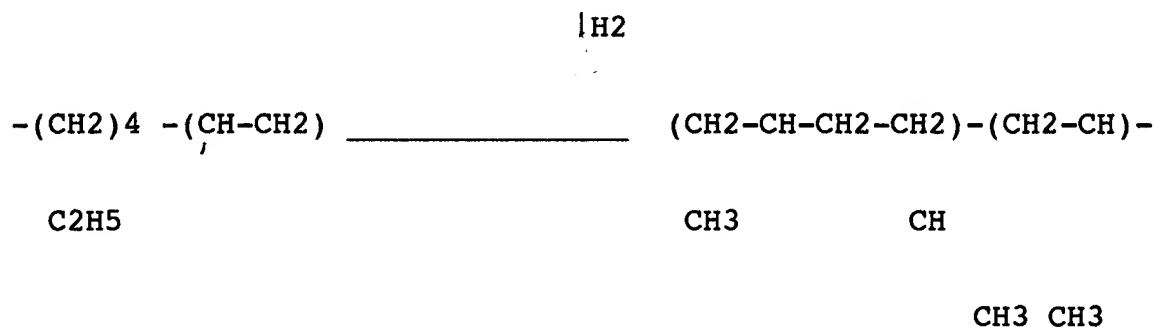
At page 13, line 31, delete "(S-EP)_n" and insert --- (S-EP)_n ---.

At page 14, lines 22-25, delete "-CH₂- groups and negligible crystallinity, ie, about $(0.5)_4$ or 0.06 or 6% and actual crystallinity of about 3%. Due to the constraints of T_g and minimum hysteresis, conventional S-EB-S have ethylene-butylene ratios of about 60:40 with a crystallinity of about $(0.6)_4$ " and insert

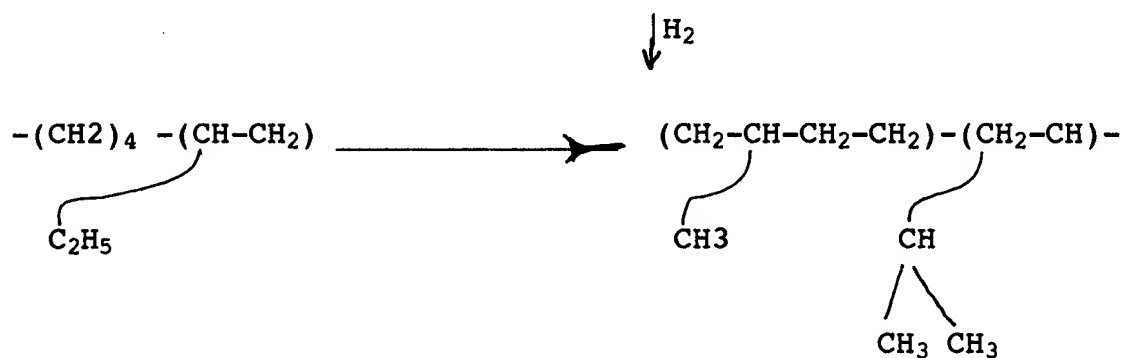
--- -CH₂- groups and negligible crystallinity, ie, about (0.5)₄ or 0.06 or 6% and actual crystallinity of about 3%. Due to the constraints of T_g and minimum hysteresis, conventional S-EB-S have ethylene-butylene ratios of about 60:40 with a crystallinity of about (0.6)₄ ---.

At page 14, line 30: "-CH₂-" and insert --- -CH₂- ----.

P15, L22-27:



insert



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At page 16, lines 8-15 delete

"where R-1 denotes $(-\text{CH}_2-)_4$,

R-2 denotes $-(\text{CH}-\text{CH}_2)-$,
 C_2H_5

R-3 denotes $-(\text{CH}_2-\text{CH}-\text{CH}_2-\text{CH}_2)-$, and
 CH_3

R-4 denotes $-(\text{CH}_2-\text{CH})-$
 CH
 $\text{CH}_3 \text{ CH}_3$

Therefore, the percentage that can crystallize is $[(-\text{CH}_2-)_4]_4$ since this is the chance of getting four $(-\text{CH}_2-)_4$ units in sequence. The percentage that will" and insert

--- "where R-1 denotes $(-\text{CH}_2-)_4$,

R-2 denotes $-(\text{CH}-\text{CH}_2)-$,
 C_2H_5

R-3 denotes $-(\text{CH}_2-\text{CH}-\text{CH}_2-\text{CH}_2)-$, and
 CH_3

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 CH
 $\text{CH}_3 \text{ CH}_3$

Therefore, the percentage that can crystallize is $[(-\text{CH}_2-)_4]_4$ since this is the chance of getting four $(-\text{CH}_2-)_4$ units in sequence. The percentage that will ---.

At page 16, line 29 correct:

n =	(-CH ₂ -) ₄	[(-CH ₂ -) ₄] ₄	0.6 X [(-CH ₂ -) ₄] _n
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To read:

n =	(-CH ₂ -) ₄	[(-CH ₂ -) ₄] ₄	0.6 X [(-CH ₂ -) ₄] _n
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At page 17, line 14, correct: "(-CH₂-)₄" to read --- (-CH₂-)₄ --- and correct:

n =	(-CH ₂ -) ₄	[(-CH ₂ -) ₄] ₄	0.6X [(-CH ₂ -) ₄] _n
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to read ---

n =	(-CH ₂ -) ₄	[(-CH ₂ -) ₄] ₄	0.6 X [(-CH ₂ -) ₄] _n
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At page 17, line 32, correct "(A-Z)_nX" to read --- (A-Z)_nX ---.

At page 18, line 6-11, delete

"invention include: (S-E-EB-S)_n, (S-E-EP)_n, (S-B-EP)_n, (S-B-EB)_n, (S-E-EP-E)_n, (S-E-EB-B)_n, (S-B-EP-B)_n, (S-B-EB-B)_n, (S-E-B-EB)_n, (S-E-B-EP)_n, (S-EB-EP)_n, (S-E-EB-EP)_n, (S-E-EP-EB)_n, (S-B-EB-EP)_n, (S-B-EP-EB)_n, (S-E-EP-E-EP)_n, (S-E-EP-E-EB)_n, (S-EP-B-EP)_n, (S-B-EB-B-EB)_n, (S-B-EB-B-EP)_n, (S-E-EB-B-EP)_n, (S-E-EP-B-EB)_n, (S-E-EP-

E-EP-E)_n, (S-B-EP-B-EP-B)_n, (S-E-EP-E-EB)_n, (S-E-EP-E-EP-EB)_n, (S-E-EP-E-EP-E)_n, (S-E-EP-EB-EP-EB-B)_n" and insert

--- (S-E-EB-S)_n, (S-E-EP)_n, (S-B-EP)_n, (S-B-EB)_n, (S-E-EP-E)_n, (S-E-EB-B)_n, (S-B-EP-B)_n, (S-B-EB-B)_n, (S-E-B-EB)_n, (S-E-B-EP)_n, (S-EB-EP)_n, (S-E-EB-EP)_n, (S-E-EP-EB)_n, (S-B-EB-EP)_n, (S-B-EP-EB)_n, (S-E-EP-E-EP)_n, (S-E-EP-E-EB)_n, (S-EP-B-EP)_n, (S-B-EB-B-EB)_n, (S-B-EB-B-EP)_n, (S-E-EB-B-EP)_n, (S-E-EP-B-EB)_n, (S-E-EP-E-EP-E)_n, (S-B-EP-B-EP-B)_n, (S-E-EP-E-EB)_n, (S-E-EP-E-EP-EB)_n, (S-E-EP-E-EP-E)_n, (S-E-EP-EB-EP-EB-B)_n ---.

At page 19, line 14, delete "(SB)_n styrene-butadiene and (S-EB)_n, (S-EB-S)_n, (S-E-EP)_n, (SEP)_n, (SI)_n" and insert --- (SB)_n styrene-butadiene and (S-EB)_n, (S-EB-S)_n, (S-E-EP)_n, (SEP)_n, (SI)_n ---.

At page 19, line 36, correct "-50oC" to read --- -50°C ---.

At page 21, Lines 16, 23, 30, 33, 34, 37 correct "30oC" to read ---30°C ---.

At page 21, Lines 18, 21, 26, & 28 correct "25oC" to read ---25°C ---.

At page 23, line 12, after " also be used (e.g., H-300 (1290 Mn))." insert --- It is well know that minor and sufficient amounts of Vitamin E is added to the described commercially available oils during bulk processing which is useful as a oil stabilizer, antioxidant, and preservative.---

At page 23, line 5, delete "(S-EB-EP)_n, (SEB)_n, (SEP)_n" and insert --- (S-EB-EP)_n, (SEB)_n, (SEP)_n ---.

At page 24, Lines 35-37, delete "GnGn, GnGnGn, GnMn, GnMnGn, MnGnMn, MnGnGn, GnGnMn, MnMnMnGn, MnMnMnGnMn, MnGnGnMn, GnMnGnGn, GnMnMnGn,

GnMnMnGn, GnGnMn Mn, GnGnMn GnMn, GnMnGnGn, GnGnMn, GnMnGnMnMn, MnGnMnGnMnGn, GnGnMnMnGn, GnGnMnGnMnGn, and the like or any of their permutations of one or more Gn with Mn" and insert --- GnGn, GnGnGn, GnMn, GnMnGn, MnGnMn, MnGnGn, GnGnMn, MnMnMnGn, MnMnMnGnMn, MnGnGnMn, GnMnGnGn, GnMnMnGn, GnMnMnGn, GnGnMn Mn, GnGnMn GnMn, GnMnGnGn, GnGnMn, GnMnGnMnMn, MnGnMnGnMnGn, GnGnMnMnGn, GnGnMnGnMnGn, and the like or any of their permutations of one or more Gn with Mn ---.

At page 25, Lines 16-17, delete "230C to about 1000C forming a paste like mixture and further heating said mixture uniformly to about 1500C to about 2000C" and insert --- 230C to about 1000C forming a paste like mixture and further heating said mixture uniformly to about 1500C to about 2000C ---.

At page 26, Lines 19-23, delete "8X105 dyne/cm2 to about 107 dyne/cm2 and greater; (2) elongation of less than about 1,600% to about 3,000% and higher; (3) elasticity modules of about 104 dyne/cm2 to about 106 dyne/cm2 and greater; (4) shear modules of about 104 dyne/cm2 to about 106 dyne/cm2" and insert --- 8X10⁵ dyne/cm² to about 107 dyne/cm² and greater; (2) elongation of less than about 1,600% to about 3,000% and higher; (3) elasticity modules of about 10⁴ dyne/cm² to about 10⁶ dyne/cm² and greater; (4) shear modules of about 10⁴ dyne/cm² to about 10⁶ dyne/cm² ---.

At page 26, Lines 24, 26, 30, 32, correct "230C" to read --- 230C ---.

At page 28, line 5, delete "Because" and insert ---- The crystal gels of the invention can be formed into gel strands, gel tapes, gel sheets, and other articles of manufacture. Moreover, because ----.

At page 29, Line 28, correct "180o U" to read --- 180° U ---.

At page 30, Lines 11-38, delete "The crystal gels of the invention find use as airbags designed for rapid deployment by expanding

pressurized or ignitable gas as shown in Figs 1a-9i, 10d, 10e, 12, and 15.

The various components are denoted by:

1 Shape of gel expansion envelop. 2 Gel, 3 External retainer, 5 internal retainer, 6 reinforcing retainer, 7 mechanical retainer, 8 semi integral retainer, 9 integral pin retainer, 10 partial external integral retainer, 12 body, 13 gas inlet from filter, 14 outer sheet, 15 inner sheet, 16 eye retainer ring cavity, 18, back partial integral retainer, 19 T retainer (integral reinforcing), 20 thin gel diaphragm, 21 thick gel diaphragm, 22 multiple progressive thinner gel diaphragm, 23 multiple progressive thicker gel diaphragm, 24 multiple single layer expansion control elements, 25 single single layer expansion control elements, 26 dual single layer expansion control elements, 27 multiple multiple layer expansion control elements, 28 multiple layer diverted elements, 29 patterned MDE, 31 full retained gel cup, 32 partial retained gel cup, 33 gel cavity, 34 S gel shaped, 35 bulged gel, 36 compact assembly, 37 double layered, 38 multiple window, 39 double gel, 40 baffle, 41 gel dia., 42 expanded 7a-7d, 43 non-uniform gel dia., 44 gel restrainer, 45 restrained envelope, 46 non-uniform gel expanded mass, 47 expansion retainer assembly, 48 expansion control elements, 50 dual expansion dia., 52 single, 54 internal and external, 56 triple, 57 multiple layered, 58 triple internal, 59 triple small and dual large, 60 equal triple, 61 dual internal with single external surround dia., 10c driver gel dia., 10d enveloping driver dummy, 10e enveloping passenger dummy, 11 conventional air bag deployment, 12 ge and break-out pressures, 13 gel diameter expansion final pressures.

The expansion of the gel air bag is substantially pure volume expansion or dilation as related to K , bulk modulus, y , young's modulus: $K=y/3(1-2t)$, $t=3k-2n/6k-2n$, where t =poisson's ratio, $b=1/k$ compressibility = -change in $V/(V \cdot \text{change in pressure } P)$."

At page 31, Lines 1-4, delete "Surface expansion measure of air bag from initial to expanded state is from 630 to 833% depending on thickness of original air bag. The initial air bag thickness can vary